

NAVY RESPONSES TO U. S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS DATED JULY 8, 2013

ON THE DRAFT WORK PLAN MAINTENANCE CLEANING OF THE QDC OUTFALL DRAIN LINE AND ASSOCIATED CATCH BASINS, FORMER NAVAL CONSTRUCTION BATTALLION CENTER (NCBC) DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND (JUNE 14, 2013)

Navy responses to U. S. Environmental Protection Agency (EPA) comments on the Navy's Draft Work Plan Maintenance Cleaning of the ODC Outfall Drain Line are presented below. The EPA comments are presented first (in italics) followed by Navy's responses.

General Comments

EPA General Comment 1: Study Area 01, part of OU7, has had several soil and groundwater investigations. Has the residual in the catch basins ever been sampled? If not, the characterization of the sediments in the drain line is not complete until samples have been analyzed.

Response: As stated in Section 4.1 of the Work Plan, two composite samples and six discreet VOC samples will be collected from the catch basins and QDC Outfall 001 for waste characterization purposes. Composite Sample 1 contains the catch basin (i.e., CB-03) where one of the northwestern drain lines intersects the main Outfall 001 system and Composite Sample 2 contains the catch basin (i.e., CB-09) where the other northwestern drain line intersects the main Outfall 001 system. In addition, discreet samples of residual material in the catch basins were collected as part of the SASE in 2010, including samples from catch basins CB-09 and CB-05, and from the QDC Outfall 001. All three of these locations are downstream of catch basins in Study Area 01. In addition, the purpose of the composite samples is for waste characterization.

EPA General Comment 2: Please include the data tables from previous investigations into the residuals in the catch basins as an appendix to this work plan for completeness.

Response: The Work Plan is complete as provided. These data are not needed for waste characterization purposes and therefore do not need to be included in this Work Plan.

EPA General Comment 3: EPA disagrees that the drain line & catch basin wash water should be considered one waste stream. Navy should filter the wash water and sample both the water and separated sediments prior to sending the two waste streams off site for disposal. Navy may want to also send the water through carbon prior to sampling since there have been detections of VOCs in the sediment samples recently analyzed and in previous investigations into the shallow groundwater, however this may not be necessary based on the sediment sampling results.

Response: It is estimated that 18,000 gallons of water will be needed to flush the drain lines, the residual material component of this effluent waste stream will be minimal (i.e., less than 10% as stated in Section 3.4 of the Work Plan). Therefore the wash water will be treated as a single aqueous waste stream.

EPA General Comment 4: EPA also has concerns over the composite sampling proposed for characterization of the main drain line. The five point composite sample should not be determined by portions of equal weight. The sample should be created by portions of equal volumes. In addition, the resulting contaminant concentrations should be multiplied by the number of replicates (5) to determine the final concentration.

Response: Since the purpose of the composite samples is for waste characterization (i.e., determine average concentration), the results will not be multiplied by the number of replicates. The composite samples will be created by portions of equal volumes, to the extent practical.

EPA General Comment 5: A disposal facility needs to be chosen prior to collection of any waste disposal characterization samples, and contingencies need to be in place in case something unexpected (i.e. high levels of PCBs) is encountered. It is recommended that the applicable disposal criteria from the selected disposal facility be included as an attachment.

Response: Any special requirements mandated by the disposal facility will be followed and documented in the Summary Report. Waste characterization will include analysis of PCBs as specified in Section 4.1 of the Work Plan. The disposal facility will be chosen as part of the award of the subcontracted work. Disposal criteria will be provided at that time.

EPA General Comment 6: A sample collection procedure (SOP) for collecting composite samples and discrete VOC samples needs to be included as part of this work plan.

Response: The waste characterization sample collection procedures are provided in Section 4.2 of the Work Plan. The sample collection will be documented in the field notes, which will be included in the Summary Report.

Specific Comments

EPA Specific Comment 1 - Page 1, Section 1.2 - The text indicates there are two separate northwestern drain line systems intersecting with the main Outfall 001 system at CB-03 and at CB-09. The CB-03 system may have four upgradient catch basins, while the CB-09 system may have two upgradient catch basins. These upgradient catch basins were not assessed or sampled during the Navy's Drain Line Investigation in October 2010 (reported in the Navy's Drain Line Investigation and Data Report, dated May 2011). As such, potential residual material in catch basins in each separate drain line system should be collected and separately composited for waste profiling prior to vacuuming and water jetting. The waste profile data should dictate whether the northwestern system wastes may be combined with or segregated from the main Outfall 001 system wastes.

Response: Samples from catch basins CB-09 and CB-05, and from the QDC Outfall 001 were collected during the SASE conducted in 2010. These three locations are downstream of the two separate northwestern drain line systems intersecting the main Outfall 001 system. Therefore, it is assumed that these locations contain similar contaminants as the two separate upgradient northwest drain line systems. Therefore these two drain line systems do not need to be profiled separately.

EPA Specific Comment 2. Page 4, Section 1.3, first bullet and page 10, Section 4.1 - The text in the first bullet indicates that 5 discreet VOC samples will be collected, but six sample locations are listed in the bullets in Section 4.1 (CB-02, CB-04, CB-05, CB-06, CB-08, and QDC Outfall 001). Please confirm and revise as appropriate. Also, please see comment below.

Response: Six discreet VOC samples will be collected as indicated in Section 4.1. The five discreet VOC samples listed in Section 1.3 is a typo, it should be six.

EPA Specific Comment 3. Page 4, Section 1.3, 1st bullet/Page 10, Section 4.1 - The main drain line system is comprised of nine catch basins. However, during the Navy's Drain Line Investigation in October 2010, residual debris from four catch basins and from Outfall 001 was collected for chemical analysis. The Maintenance Work Plan states that two separate 5-point composite samples of residual materials from two separate groups of catch basins and the Outfall 001 drain line (composite group I: CB-02, CB-03, CB-06, CB-07, CB-08; composite group 2: CB-04, CB-05, CB-09, Outfall 001) will be collected for waste profiling, and the data used to determine the appropriate disposal procedure for the residual materials. It is unclear whether the Navy intends to combine the residual wastes from all of the catch basins and drain lines in one vacuum truck, or if separate vacuum trucks will collect residual materials based on the composite grouping. If only one vacuum truck is used, is the Navy planning to average the two waste profile data sets to select the appropriate disposal requirements for the combined residual material waste? If only one vacuum truck is used, and if one of the composite waste profile samples are hazardous and the other is non-hazardous, how will the Navy handle the disposal of the combined wastes? Please clarify the approach.

Response: As stated in the Work Plan, it is assumed that the waste stream will be non-hazardous. This assumption will be evaluated after the waste characterization samples have been analyzed. In the event that a waste characterization sample indicates the sample is hazardous, water jetting of the drain lines associated with the hazardous waste characterization sample will be performed separate from sections of the drain line system considered to contain non-hazardous waste. The waste streams will be segregated into hazardous and non-hazardous and disposed of appropriately. Any waste segregation that takes place and all waste disposal details will be documented in the Summary Report. Please also see the response to Specific Comment 4 below.

EPA Specific Comment 4. Page 4, Section 1.3, 3rd bullet/Page 15, Section 5.2 - The text indicates that a vacuum truck will remove the residual debris from the catch basins and drain lines. The second sentence indicates that secondary containment will capture the water and residual material washed from the final catch basin (CB-05) to QDC Outfall 001. On page 15, Section 5.2, the text describes the specific cleaning sequence where (1) a vacuum captures residual solid debris from each catch basin, and then (2) water jetted into the upgradient catch basin flows down gradient where it is simultaneously vacuumed from the adjacent down gradient catch basin. Based on this simultaneous rinse/vacuum sequence, how will the Navy know whether the vacuumed rinse water contains 10% or fewer solids? Additionally, will separate vacuum trucks be used to capture solid residual materials versus the aqueous rinse water? Furthermore, based on the typical 6,000 gallon capacity of "straight" vacuum trucks and the Navy's estimate to use 18,000 gallons of rinse water, will captured rinse water be contained in multiple separate vacuum trucks or discharged into one frac tank (typical capacity of 20,000 gallons)? Will the subsequent aqueous waste profile sample(s) be collected from each full vacuum truck or will it be a single sample of the combined aqueous waste in the frac tank?

Response: Specifics regarding the size and number of vacuum trucks and whether a frac tank will be needed for temporary storage of the aqueous waste stream will be proposed in the bids from the subcontractors. These specifics will be evaluated during the bid review process. The size and number of vacuum trucks and frac tanks actually used will be documented in the Summary Report. Since the waste stream is considered a single aqueous waste stream with less than 10% residual material, separate vacuum trucks will not be needed for aqueous and solid waste streams. In the event additional waste profile samples are mandated by the disposal facility, these will be collected per the disposal facility's requirements. As previously mentioned, any waste segregation that takes place and all waste disposal details will be documented in the Summary Report.

EPA Specific Comment 5. Page 4, Section 1.3, 4th bullet/Page 15, Section 5.1 - The text indicates that the temporary haul road will be disassembled at the end of the project. However, the text later indicates on page 15 (Section 5.1) that the haul road should be left in place for the forthcoming RI field work, if feasible. How and when will the Navy know whether the haul road will be removed or left in place?

Response: The decision on whether to remove or leave in the place the temporary haul road will be made based on the timing of the maintenance cleaning relative to the timing of the start of the RI field work. If left in place for the RI, the subcontractor will remove the temporary haul road after the completion of the RI sampling of the wetland.

EPA Specific Comment 6. Page 8, Section 3.4 - The text indicates that approximately 18,000 gallons of water will be needed to flush the drain line. What assumptions did the Navy use to calculate this volume? Does it account for water jetting both the main Outfall 001 drain line and the two northwestern drain line systems? The interior capacity of the main Outfall 001 system (1,000 feet long, 21 inch inner diameter) is approximately 18,000 gallons, and the two northern systems together (650 feet long, 21 inch inner diameter) is approximately 11,700 gallons at one time.

Response: The diameter of the drain line ranges from 12 to 21 inches, it is not 21 inches along the entire drain line. The volume estimate was based on professional judgment of individuals who have performed water jetting consulted during the development of this scope of work. In addition, the water jetting process is a high pressure/low volume process. The final volume of water used during the maintenance cleaning will be documented in the Summary Report.

EPA Specific Comment 7. Page 8, Section 3.4 - The text indicates that the Navy anticipates that solids will account for less than 10% of the aqueous waste stream following water jetting, and therefore the captured waste is proposed to be disposed of as a single aqueous waste stream. However, will the Navy collect a sample of the captured aqueous waste to determine the solid percentage? Is the 10% solid limit a requirement set by the intended disposal facility? If the waste stream contains more than 10% solids, what actions will the Navy take to segregate the solids from liquids? Will this solid waste be segregated from the other vacuumed solid debris? Please provide additional clarification on how these issues will be addressed and managed, if applicable. Please see our General Comments for EPA's preference of two waste streams.

Response: Please see responses to previous comments.

EPA Specific Comment 8. Page 10, Section 4.1, Sampling Locations, and Rationale - The last sentence in the first paragraph indicates that five discreet grab samples will be collected for VOC and TCLP VOC analysis, but the following bullet list mentions six locations. Please confirm whether five or six samples will be collected. Additionally, please explain why grab samples for VOC and TCLP VOC analysis are not proposed for CB-03, CB-07, CB-09, and for catch basins from the two northern drain line systems.

Response: Please see response to Specific Comment 2.

EPA Specific Comment 9. Page 10, Section 4.1 - The text indicates that each composited sample will consist of equal portions, by weight, of residual material from the separate composite groups. However, the individual composites should be based on equal volume instead of weight. Additionally, if one catch basin contains substantially more residual material than other catch basins in the same composite group; will the Navy account for this difference in preparing the composite sample?

Response: Please see responses to General Comments 4, 5, and 6.

EPA Specific Comment 10. Page 11, Section 4.1 - The text indicates that changes to the composite and discreet VOC samples may be made in the field based on "...PID readings..." Please explain the decision matrix for when it may be appropriate to change the composite and discreet VOC samples based on PID readings.

Response: This is adequately explained in Section 4.1. In addition, please see the last sentence of Section 4.1 (i.e., changes will be documented in the field records and Summary Report).

EPA Specific Comment 11. Page 11, Section 4.2, Procedures for Sample Collection - Please add a sentence or two at the end of this section that states that the field samplers will submit sufficient sample to the laboratory so that lab quality control samples such as MS/MSDs and lab duplicate samples can be analyzed.

Response: Since the composite samples will be used for waste characterization purposes, site-specific quality control (QC) samples will not be submitted. Laboratory quality control samples associated with the waste characterization samples will be batch quality control samples, not site-specific quality control samples.

EPA Specific Comment 12. Page 12, Section 4.4 - Samples submitted for PCB analysis should be prepared using manual Soxhlet extraction, not microwave extraction. Please specify this extraction method for PCB analysis.

Response: Manual Soxhlet extraction will not be required for the PCB extraction of these waste characterization samples. The sampling is not part of a TSCA PCB in-situ site characterization; it is for waste characterization.

EPA Specific Comment 13. Page 12, Section 4.4 - Please confirm that an ELAP accredited laboratory will be used to analyze the samples collected as part of this work plan (or revise the text to clearly state this fact).

Response: An ELAP accredited laboratory will be used for the sample analysis. This will be documented in the Summary Report.

EPA Specific Comment 14. Page 13, Section 4.6, Requirement for Data Evaluation - It is recommended that the text include the fact that while no formal data validation will be performed, the Project Chemist or CTO Manager will at a minimum review and evaluate the quality control criteria for the QC samples discussed in Section 4.5 (i.e. MS/MSDs, LCSs, surrogate compound, lab duplicates, etc.). The results of this evaluation should be reported in the closeout report.

Response: The CTO Manager and/or Project Chemist will review the laboratory batch QC associated with the waste characterization samples to confirm the data usability. A statement of the data usability will be included in the Summary Report, but no formal data validation will be performed on this waste characterization data.

EPA Specific Comment 15. Page 15, Section 5.2 - Please install the secondary containment system at the end of Outfall 001 before water jetting begins. Also, please describe the secondary containment system design.

Response: The recommendation to put in the place the secondary containment system at the opening of QDC Outfall 001 before water jetting begins will be implemented. The actual system design will be proposed in the bids from the subcontractors. The system designs proposed will be thoroughly evaluated during the bid review process. Award of the work will be contingent on the subcontractor having an adequate secondary containment system such that additional contamination is not released in the study area of the RI.

EPA Specific Comment 16. Page 15, Section 5.2 - If following the vacuuming of residual debris from a catch basin the Navy determines the catch basin is not intact (e.g. sidewalls or bottom is cracked, soil is exposed, etc.), will water jetting into this catch basin (from the upgradient catch basin access point) still occur? If not, how will the connecting drain line section be cleaned? Is the Navy planning to repair damaged catch basins?

Response: If this scenario is encountered, the residual material will be vacuumed out and the compromised catch basin will be identified as requiring additional characterization during the RI. Unless the catch basin is severely compromised, the water jetting will still occur. The volume and pressure of the water jetting will be adjusted as necessary such that the vacuuming in the receiving catch basin will outpace the volume of aqueous waste stream entering it. Since the compromised catch basin already has the potential to have impacted surrounding soil, proceeding with the water jetting in a careful and controlled manner as described above is not likely to worsen impacts. All decisions on how to handle compromised catch basins will be thoroughly discussed between the Navy, Resolution, and the subcontractor prior to continuing with water jetting. If it is determined that the catch basin is near collapse or structural failure and unable to handle water jetting, water jetting will be performed from the end of the drain line in the compromised catch basin back up to the previous upgradient catch basin that has already been cleaned. A vacuum truck will be used at this upgradient catch basin to collect the waste stream in the same manner as described for the downgradient catch basins. Details of any catch basin near collapse or structural failure and how it was handled will be included in the Summary Report.

EPA Specific Comment 17. Page 15, Section 5.3 - It seems more appropriate to specify that a decontamination pad shall be used, and that decontamination fluids shall be collected and disposed of with the maintenance cleaning waste stream.

Response: Section 5.3 does specify that a decontamination pad will be constructed if necessary and that the decontamination fluids will be collected and disposed with the maintenance cleaning waste stream.

NAVY RESPONSES TO

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS DATED JULY 19, 2013

ON THE DRAFT WORK PLAN MAINTENANCE CLEANING OF THE QDC OUTFALL DRAIN LINE AND ASSOCIATED CATCH BASINS, FORMER NAVAL CONSTRUCTION BATTALLION CENTER (NCBC) DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

(JUNE 14, 2013)

Navy responses to Rhode Island Department of Environmental Management (RIDEM) comments on the Navy's Draft Sampling and Analysis Plan (SAP) QDC Outfall 001 Remedial Investigation are presented below. The RIDEM comments are presented first (in italics) followed by Navy's responses.

Comments

RIDEM Comment 1. Page 4, Section 1.3, Overview of Planned Maintenance Activities, Bullet 2 - This bullet notes the installation of a temporary haul road. Please coordinate with Rhode Island CRMC on construction of said temporary haul road as it must comply with the Rhode Island Storm Water Design & Installation Standards Manual, December 2010.

Response: The Navy will coordinate with the Rhode Island CRMC prior to the construction of the temporary haul road. A Coastal Zone Management Consistency Determination will be prepared.

RIDEM Comment 2. Page 4, Section 1.3, Overview of Planned Maintenance Activities, Bullet 3 - Please describe the secondary containment that will be used to capture the water and residual material that is washed from the final catch basin and where it will be located in relation to the drain line.

Response: The secondary containment system will be located at the end of the drain line at the outfall. The actual system design will be proposed in the bids from the subcontractors. The system designs proposed will be thoroughly evaluated during the bid review process. Award of the work will be contingent on the subcontractor having an adequate secondary containment system such that additional contamination is not released in the study area of the RI.

RIDEM Comment 3. Page 8, Section 3.3, Permits and Approvals - This section notes that permits and approvals from federal, state, or local governments are not required for the work covered under this plan. Please be advised that CRMC has certain requirements for the construction of temporary haul roads within its jurisdiction and approval from CRMC may be required. Please coordinate with David Reis of CRMC at 401-783-7365 prior to executing the work plan.

Response: Please see response to Comment 1. The Navy will be sure to coordinate with David Reis of CRMC.

RIDEM Comment 4. Page 8, Section 3.4, Waste Management - This section states that there will be 18,000 gallons of water of which 10% will be residual material. It is not entirely clear

what residual materials are, but it is assumed it is solids. This will generate almost 9 cubic yards of solid material to be disposed of. This section also states that the waste stream is assumed to be non-hazardous. Please state if the Navy is going to sample to confirm the assumption. Based on the May 2011 Drain Line Investigation and Data Report for Outfall 001 each catch basin had exceedances for VOCs, SVOCs except C8-09, PAHs except C8-09, TPH except C8-09 and Metals except CB-02. Please state how both the solid and liquid fractions are going to be stored until disposed of.

Response: Sampling of the aqueous waste stream is not planned at this time but will be performed if required by disposal facility. It is anticipated that storage of the single aqueous waste stream will not be required; the vacuum trucks will transport the aqueous waste stream directly the disposal facility. In the event that storage of the aqueous waste stream is required until disposal, frac tanks will be used. As stated in the Work Plan, it is anticipated that maintenance cleaning will generate a single aqueous waste stream. Any deviations from the assumptions in the Work Plan will be documented in the Summary Report.

RIDEM Comment 5. Page 9, Section 3.5, Site Security - This section states that the site is located in a secure area. Please state what makes it secure. The site is adjacent to a parking lot that is used by recreational visitors to Allen Harbor Landfill and Calf Pasture Point. The concern is that some of the visitors may be curious as to what is going on at the site and venture over to check out the work since access is fairly easy. RIDEM personnel park at this lot when they inspect this site.

Response: The section will be revised to remove the statement that the site is located in a secure area. High visibility temporary fencing along with appropriate signage will be used to keep curious onlookers from entering the work area. In addition, Resolution will have staff on site to oversee the subcontractor and work area. The Navy will also coordinate with QDC and the Town of North Kingstown as necessary to restrict visitors from entering the work area.

RIDEM Comment 6. Page 13, Section 4.7, Decontamination - Please note that IDW should be handled in accordance with RIDEM's Policy Memo 95-01 "Guidelines for the Management of Investigative Derived Wastes".

Response: Any IDW generated will be handled in accordance with RIDEM's Policy Memo 95-01.

RIDEM Comment 7. Section 5.2, Maintenance Cleaning - Please confirm if the drain lines that lead into CB-03 and CB-09 are also going to be cleaned. Based on Section 5.0 there are 9 identified catch basins and 1600 feet of drain line to be cleaned. The text seems to indicate that these catch basins and drain lines will be cleaned as the length of pipe is approximately 1600' (including drain lines into CB-03 and CB-09), but the number of catch basins don't seem to add up.

Response: The drain lines that lead into CB-03 and CB-09 will be cleaned.

RIDEM Comment 8. Page 16. Section 5.4, Site Restoration - This section states that the site will be restored to pre-existing conditions. Section 5.1.2 (Construction of Temporary Haul Road) notes that the temporary haul road may be left in place for future RI work. This should be

mentioned in this section including who will make the determination to retain the road and who will have responsibility for ultimately restoring the area back to its original condition once the use of the temporary haul road has ended.

Response: The decision on whether to remove or leave in the place the temporary haul road will be made by the Navy in conjunction with QDC and the Rhode Island CRMC based on the timing of the maintenance cleaning relative to the timing of the start of the RI field work. If left in place for the RI, the subcontractor will remove the temporary haul road after the completion of the RI sampling of the wetland. Regardless of the timing of the removal of the temporary haul road, the site will be restored to pre-existing conditions by the subcontractor once the temporary haul road has been removed.